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April 1, 2004

Total Number of Pages
(including cover letter): 34

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**MAIL STOP: AMENDMENT
EXAMINER DUNG T. NGUYEN**

Telecopier Phone: (703) 872-9306

From: ERIC L. MASCHOFF, Reg. No. 36,596

Comments: Please see attached.

Serial No.: 10/078,473

Docket No.: 15436.438.1

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FILED VIA FACSIMILE

PATENT APPLICATION

Docket: 15436.438.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Hoki Kwon

Serial No.:

10/078,473

Filed:

February 21, 2002

Confirmation No.:

4854

For:

CARBON DOPED GAASSB TUNNEL JUNCTION FOR THE APPLICATION OF LONG-WAVELENGTH VCSEL

Examiner:

Dung T. Nguyen

CERTIFICATE OF FACSIMILE TRANSMISSION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I hereby certify that this paper is being transmitted via facsimile at facsimile number (703) 872-9306 to the Patent and Trademark Office on the date shown below.

Dated this 1st of April, 2004.

Respectfully submitted,

E. J. Mangano

ERIC L. MASCHOFF
Attorney for Applicant
Registration No. 36,596
Customer No. 022913

Transmitted: Reply Under 37 C.F.R. ☐ 1.111
Information Disclosure Statement
Copy of Transmittal Letter dated February 5, 2004
Copy of Check No. 41078 in the amount of \$180.00
Copy of Returned Postcard Stamped as being received February 5, 2004

ELM:kjb
W:\15436438.1\KJB0000003892V001.DOC

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PATENT APPLICATION
 Docket No: 15436.438.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Hoki Kwon

Serial No.: 10/078,473

Conformation No.: 4854

Filed: February 21, 2002

For: CARBON DOPED GAASSB TUNNEL
 JUNCTION FOR THE APPLICATION
 OF LONG-WAVELENGTH VCSEL

Examiner: Dung T. Nguyen

Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Sir:

TRANSMITTAL FOR RESUBMISSION OF REPLY UNDER 37 C.F.R. § 1.111 AND INFORMATION DISCLOSURE STATEMENT

Sir:

Transmitted herewith is a Resubmission of a Reply under 37 C.F.R. §
 1.111 and Information Disclosure Statement. Please note that this is a resubmittal
 of a response that was timely filed on February 5, 2004, and from information
 received by the undersigned from the United States Patent and Trademark Office,
 not yet documented as having being filed.

R. PARRISH FRIEDMAN, JR.
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* Admitted only in California

Also enclosed are copies of the initial Certificate of Deposit for the Reply and Information Disclosure Statement submitted on February 5, 2004, along with a copy of the original transmittal letter and check number 41078 in the amount of \$180.00, all of which were included in the submission of February 5, 2004.

A copy of the stamped returned postcard indicating the date of filing as February 5, 2004, is enclosed herewith.

☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 23-3178.

☒ Any filing fees under 37 CFR 1.16 for the presentation of extra claims.

☒ Any patent application processing fees under 37 CFR 1.17.

Dated this 1st day of April, 2004.

Respectfully submitted,



ERIC L. MASCHOFF
Attorney for Applicant
Registration No. 36,596
Customer No. 022913

ELM:kjb
W:\11960\170\KJD000000609V001.doc

Atty Docket No.: H0002992

Inventor: Hoki Kwon

Application No.: 10/078,473

Filing Date: February 21, 2002

Title: CARBON DOPED GAASSB TUNNEL JUNCTION FOR THE APPLICATION OF LONG-WAVELENGTH (1.3-1.55UM) VCSEL

Documents Filed:

Reply under 37 CFR 1.111 (12 pages; page 12 in duplicate)

Amended Figure 1 (1 page)

Information Disclosure Statement (2 pages; in duplicate)

PTO Form SB/08 (11 pages)

Cited References (233)

Transmittal (1 page)

Fee Transmittal (1 page)

Check in the amount of \$180.00 (check #41078)



MLA Docket # 9910.0011.00

Via: PTO Daily Run

Sender's Initials: SKJ/MRK/kmh

Date: February 5, 2004

MCKENNA LONG & ALDRIDGE LLP

ATTORNEYS AT LAW

BANK ACCOUNT: SOUTHEAST BANK, ATLANTA

DATE: 02-03-04

PAYEE: COMMISSIONER OF PATENTS**

VENDOR #: 37437

CHECK # 41076

REF. #	GL #	INVOICE #	INVOICE DATE	DESCRIPTION	AMT. PAID
213286	1330000000000000	020504C	020504	09610.0011	180.00
TOTAL					180.00

VENDOR REFERENCE #:

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 1000000000000000

PTO/SB/21 (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

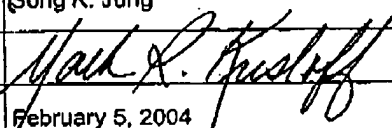
Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/078,473	
	Filing Date	February 21, 2002	
	First Named Inventor	Hoki Kwon	
	Art Unit	2828	
	Examiner Name	Dung T. Nguyen	
Total Number of Pages In This Submission	1	Attorney Docket Number	H0002992

ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input checked="" type="checkbox"/> Drawing(s) (Fig. 1) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD; Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Cited References (233) PTO SB/08 (11 pages)
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	MCKENNA LONG & ALDRIDGE LLP Song K. Jung
Signature	 Reg. No. 42,766
Date	February 5, 2004

DC:50260878.1

PTO/SB/17 (10-03)
Approved for use through 7/31/2008. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003, Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)		180.00	
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Complete If Known	
Application Number	10/078,473
Filing Date	February 21, 2002
First Named Inventor	Hoki Kwon
Examiner Name	Dung T. Nguyen
Art Unit	2828
Attorney Docket No.	H0002992

METHOD OF PAYMENT (check all that apply)	
<input checked="" type="checkbox"/> Check	<input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None
<input type="checkbox"/> Deposit Account:	
Deposit Account Number	01-1125
Deposit Account Name	Honeywell International Inc.
The Director is authorized to: (check all that apply)	
<input type="checkbox"/> Charge fee(s) indicated below	<input checked="" type="checkbox"/> Credit any overpayments
<input type="checkbox"/> Charge any additional fee(s) or any underpayment of fee(s)	
<input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	

FEE CALCULATION																																	
1. BASIC FILING FEE <table border="1" style="width: 100%;"> <tr> <th>Large Entity</th> <th>Small Entity</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> <tr> <td>Code</td> <td>Code</td> <td></td> <td></td> </tr> <tr> <td>1001 770</td> <td>2001 385</td> <td>Utility filing fee</td> <td></td> </tr> <tr> <td>1002 340</td> <td>2002 170</td> <td>Design filing fee</td> <td></td> </tr> <tr> <td>1003 530</td> <td>2003 265</td> <td>Plant filing fee</td> <td></td> </tr> <tr> <td>1004 770</td> <td>2004 385</td> <td>Reissue filing fee</td> <td></td> </tr> <tr> <td>1005 160</td> <td>2005 80</td> <td>Provisional filing fee</td> <td></td> </tr> <tr> <td colspan="2">SUBTOTAL (1)</td> <td>(\$)</td> <td>0.00</td> </tr> </table>		Large Entity	Small Entity	Fee Description	Fee Paid	Code	Code			1001 770	2001 385	Utility filing fee		1002 340	2002 170	Design filing fee		1003 530	2003 265	Plant filing fee		1004 770	2004 385	Reissue filing fee		1005 160	2005 80	Provisional filing fee		SUBTOTAL (1)		(\$)	0.00
Large Entity	Small Entity	Fee Description	Fee Paid																														
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1003 530	2003 265	Plant filing fee																															
1004 770	2004 385	Reissue filing fee																															
1005 160	2005 80	Provisional filing fee																															
SUBTOTAL (1)		(\$)	0.00																														
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE <table border="1" style="width: 100%;"> <tr> <th>Large Entity</th> <th>Small Entity</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> <tr> <td>Code</td> <td>Code</td> <td></td> <td></td> </tr> <tr> <td>1202 18</td> <td>2202 9</td> <td>Claims in excess of 20</td> <td></td> </tr> <tr> <td>1201 88</td> <td>2201 43</td> <td>Independent claims in excess of 3</td> <td></td> </tr> <tr> <td>1203 290</td> <td>2203 145</td> <td>Multiple dependent claim, if not paid</td> <td></td> </tr> <tr> <td>1204 88</td> <td>2204 43</td> <td>** Reissue independent claims over original patent</td> <td></td> </tr> <tr> <td>1205 18</td> <td>2205 9</td> <td>** Reissue claims in excess of 20 and over original patent</td> <td></td> </tr> <tr> <td colspan="2">SUBTOTAL (2)</td> <td>(\$)</td> <td>0.00</td> </tr> </table>		Large Entity	Small Entity	Fee Description	Fee Paid	Code	Code			1202 18	2202 9	Claims in excess of 20		1201 88	2201 43	Independent claims in excess of 3		1203 290	2203 145	Multiple dependent claim, if not paid		1204 88	2204 43	** Reissue independent claims over original patent		1205 18	2205 9	** Reissue claims in excess of 20 and over original patent		SUBTOTAL (2)		(\$)	0.00
Large Entity	Small Entity	Fee Description	Fee Paid																														
Code	Code																																
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1204 88	2204 43	** Reissue independent claims over original patent																															
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent																															
SUBTOTAL (2)		(\$)	0.00																														

3. ADDITIONAL FEES			
Large Entity	Small Entity		
Fee Code	Fee Code		
Fee (\$)	Fee (\$)		
Fee Description	Fee Paid		
1051 130	2051 68	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 860	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 185	Notice of Appeal	
1402 330	2402 185	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1483 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 840	2503 320	Plant issue fee	
1480 130	1480 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1808 180	1808 180	Submission of Information Disclosure Sheet	180.00
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify)			
*Reduced by Basic Filing Fee Paid		SUBTOTAL (3)	(\$)
			180.00

**or number previously paid, if greater; For Reissues, see above*

SUBMITTED BY		(Complete if applicable)	
Name (Print/Type)	Song K. Jung	Registration No. (Attorney/Agent)	35,210
Signature	<i>[Signature]</i>	Telephone	(202) 496-7413
	<i>[Signature]</i>	Date	February 5, 2004

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OFFICIALDocket No.: H0002992
Old Docket No.: V637-02992 US
(PATENT)**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:
Hoki Kwon

Confirmation No.: 4854

Application No.: 10/078,473

Group Art Unit: 2828

Filed: February 21, 2002

Examiner: Dung T. Nguyen

For: CARBON DOPED GAASSB TUNNEL
JUNCTION FOR THE APPLICATION OF
LONG-WAVELENGTH VCSEL

Customer No.: 000128

REPLY UNDER 37 CFR § 1.111Mail Stop Non-Fee Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated November 5, 2003, please amend the above-identified U.S. Patent application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 4 of this paper. This listing of claims will replace all prior versions, and listings, of claims in the application.

Amendments to the Drawings begin on page 7 of this paper and include an annotated sheet showing changes.

Remarks begin on page 8 of this paper.

An Appendix including amended drawing figures is attached following page 11 of this paper.